

Calculus

Date:

Items Needed: .Book,

Objective: The students will be able to understand the concept of a partial fraction decomposition and to use partial fraction decomposition with linear factors to integrate rational functions.

Lesson:

- Look at the example portrayed on p. 554 of a problem that could be solved by trig substitution in a relatively hard fashion or if a person would have known or recognized that if you undo a common denominator the problem becomes a very easy problem.
- Partial fractions are nothing more than undoing the common denominator.
- Look at the decomposition of $N(x)/D(x)$ into partial fractions on p. 555.
- Do example 1 & 2.
- Based on the CHS test, determine whether the quadratic form needs to be gone over.
- Discuss how you would go about finding the factors for the quadratic form.

Assignment: .Have students do 7-9, 29 p. 561.

Evaluation: (Could be from any one/several of the following)

Responses from classroom questions
Results of classroom sample problems
Homework responses
Check answer with Calculator
End of the section exam

Enrichment: